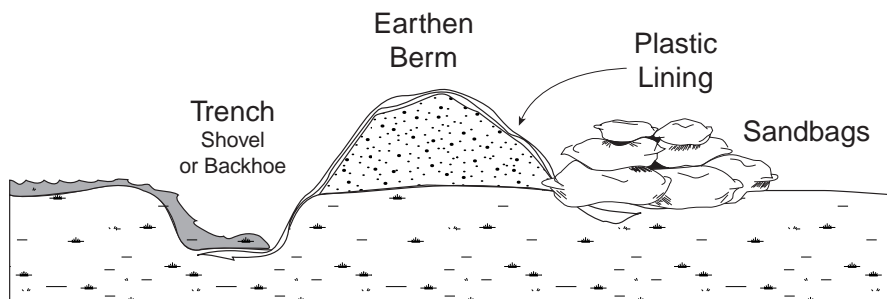


# Trenching

---



Use a trench to intercept the migration of spilled material, to divert material around a sensitive area, or to capture flush-water for recovery. Dig trenches by hand or by using a backhoe or Bobcat trimmer.

Place a trench or series of trenches at right angles to the flow and angled slightly downhill to avoid excessive pooling. Place excavated material on downhill side of trenches. In dry areas, line the sides and bottoms of trenches with plastic sheeting. In wet areas, line the downhill sides of trenches. A trench can be flooded with water to inhibit contaminant penetration and to stimulate flow toward a recovery device.

Usually, a trench in tundra will be the last option for diversion or capture of water or migrating contaminants. Do not excavate a trench in an area where the excavation will cause more damage than benefit. Before excavating in tundra, check the depth to the permafrost. The depth of a trench is limited to the active layer. Do not excavate frost-laden soils, since the disruption of the permafrost could cause thermal erosion (thermokarst).

### **APPLICABILITY**

- *Spilled Substance*: All
- *Tundra Types*: All
- *Season*: All

### **CONSIDERATIONS AND LIMITATIONS**

- Vehicle use on tundra must comply with applicable tundra travel policies (Tactic P-5).
- A Bobcat trimmer can cut about 4 inches maximum depth per cut. For depths of more than 8 inches, the trench must be as wide as the Bobcat. The Bobcat trimmer is the last option for trenching.
- A permit may be needed from the landowner before trenching.
- This tactic has been adapted from Tactic R-7 in the *Alaska Clean Seas Technical Manual* (Alaska Clean Seas, 1999, Vol. 1).

### **EQUIPMENT, MATERIALS, AND PERSONNEL**

- Shovels (1 worker per tool) – to hand dig trench
- Backhoe or Bobcat trimmer (1 operator) – to dig trench
- Visqueen or similar heavy plastic sheeting – to line trench